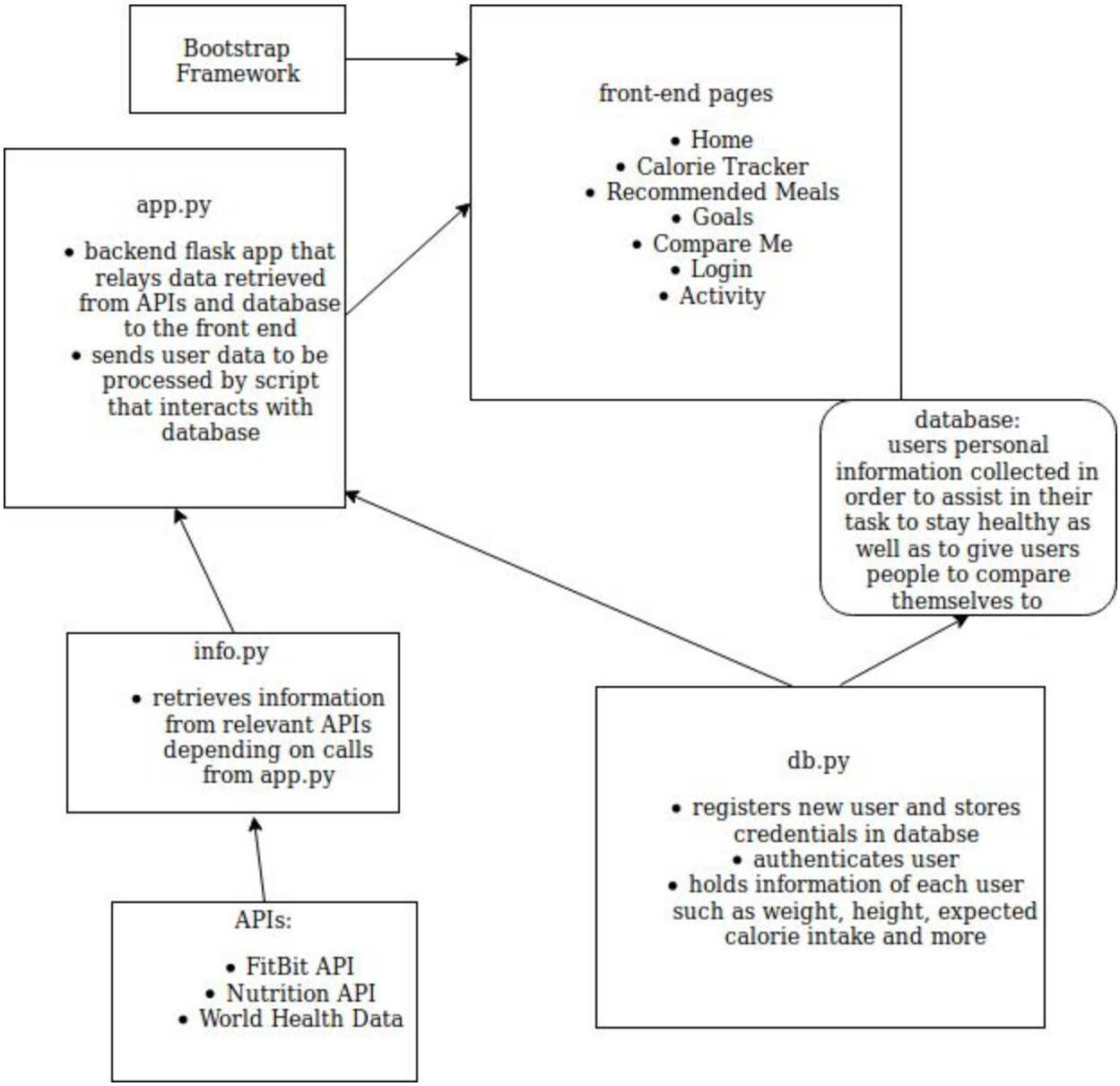
**Team Name:** teeskentelee_suuruutta
**Members:** Shafali G., Aleksandra K., Raunak C., Hasif A.
**PM:** Shafali Gupta
**Project Title:** FitBit by Bit (?)

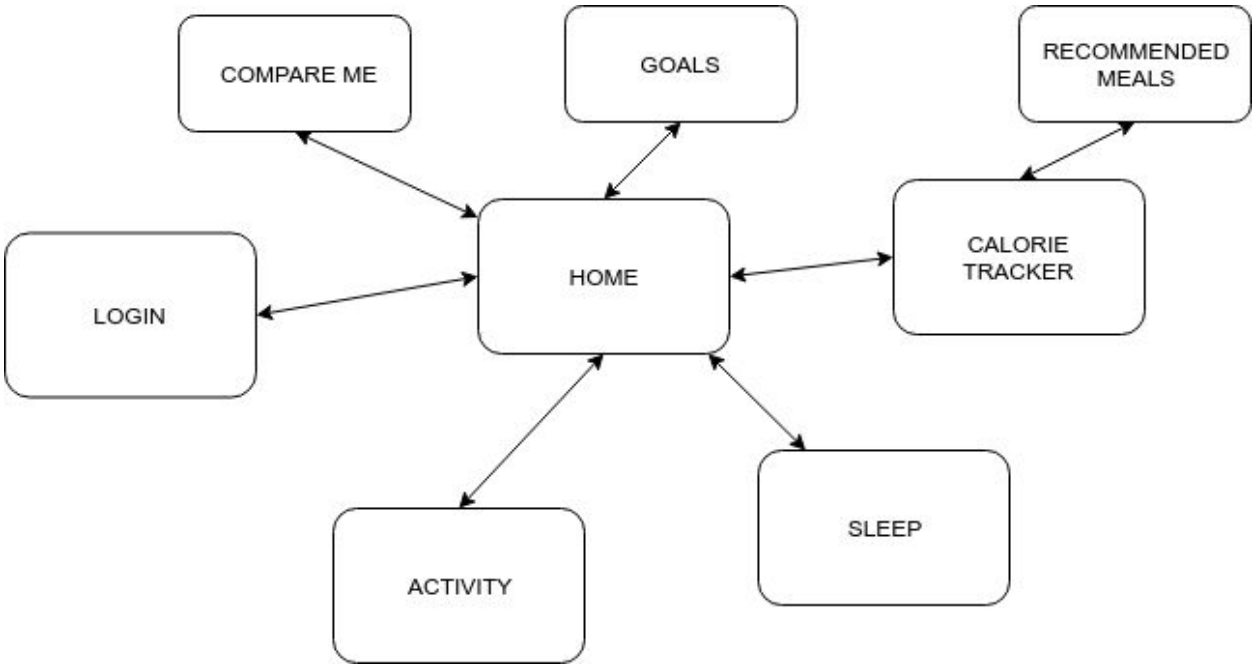
**Summary:**

A wellness tracker that allows you to log in meals, recommends you meals, and tracks your overall wellness using data the user provides and data from fitbits.

**Component Map:**



**Sitemap:**




**Sitemap Clarifications:**

LOGIN:

- No features will be available to logged out users.
- Logging in brings user to the HOME page.
- Account creation requires username, password, weight, height, age, and sex.

HOME:

- Dashboard showing most recent sleep metrics, steps taken, calories spent, weight, height, and goals remaining for the day.
- Features a point system for achieving set goals.
- User can navigate to more detailed pages for each metric from the dashboard.

GOALS:

- Essentially a settings page from which user can set number of hours they would want to sleep, steps they should take, calories they should intake, and calories they should burn through exercise. (User data exported from Fitbit on a daily basis).
- Recommended values are filled in upon creation of account using user's weight, height, age, and sex. Subject to change based on user's need.
- If the user is trying to lose weight, they can set desired weight on this page and the timeframe in which this should be accomplished. This affects caloric intakes (ie. app would override user-set preferences to help them accomplish their goals)

ACTIVITY:

- Visualizes details of user activity (number of steps taken) for the past week with line chart.
- Page shows whether daily step goal has been met/ how much is left to achieve.
- Also shows number of calories burned using Fitbit's calculations.

COMPARE ME:

- Compares user's metrics with the average of other users of the site as well as national average. Takes into account user's sex and age.

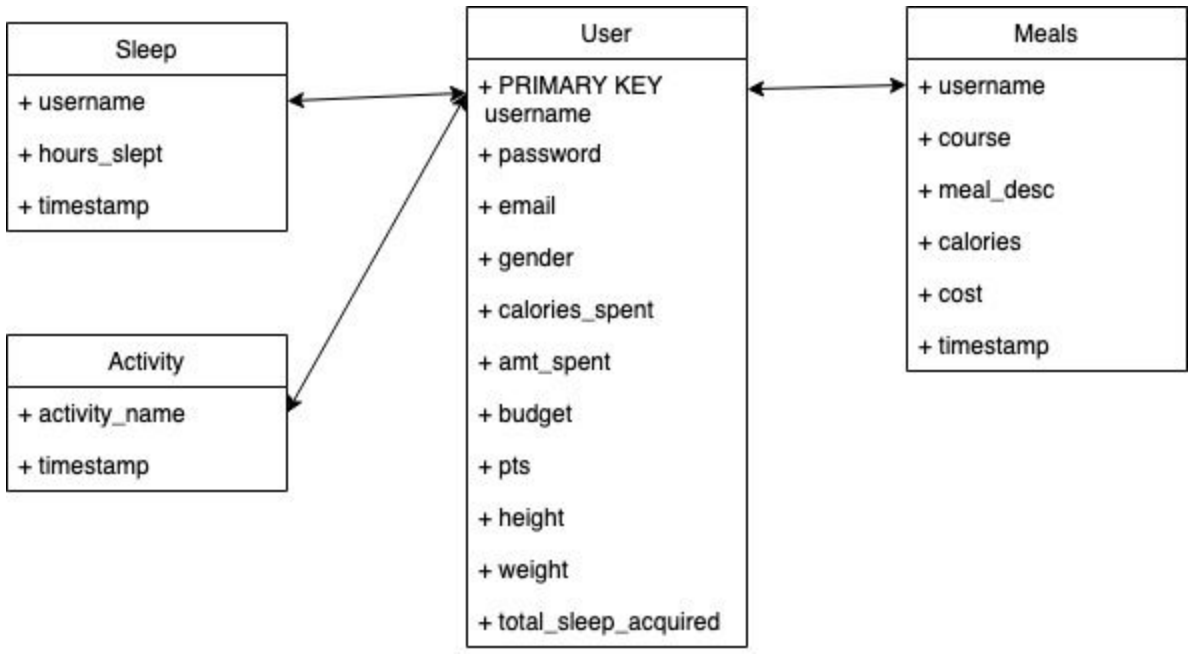
CALORIE TRACKER:

- Page shows a food log with each food's associated caloric value.
- Visualizes caloric intake for the past week with line graph.
- Shows whether daily caloric goal has been met/ how many calories are left to be consumed.
- User is penalized for irregular eating patterns, for surpassing their caloric goal, and for not reaching their goal.

RECOMMENDED MEALS:

- Recommends recipes and foods based on user's caloric needs.

**Database Schema:**




**Explanations:**

User: *stores user metadata*

- username, password, email, gender, height, weight: self-explanatory
- calories_spent: total number of calories consumed while eating (see Meals)
- amt_spent: total amount of money spent on eating meals

- budget: the amount of money reserved for spending for meals
- total_sleep_acquiried: total amount of sleep (see Sleep)
- pts: used for creating a point system

Meals: *stores the info of one meal*

- timestamp, username: self-explanatory
- calories: calorie content of one meal
- course: which type of meal was eaten (breakfast, lunch, dinner)
- meal_desc: description of meal

Sleep: *stores the info of one sleep cycle*

- timestamp, username: self-explanatory
- hours_slept: number of hours slept that night

Activity: *stores the info of one activity*

- timestamp: self-explanatory
- activity_name: name of activity

**Stretch goals -**

SLEEP:

- Visualizes hours and quality of sleep for the past week with line chart.
- Page shows whether daily sleep goal has been met.

**Frontend Framework:**

We will be using Bootstrap to build our project. Our members are most comfortable using this framework.

**Roles:**

**Shafali -** Frontend, create flask starter kit, API integration, create login and setup basic pages.
**Aleksandra -** API integration, fitbit/activity information
**Hasif-** databases
**Ranauk-** set up routes and data science- pandas.

**API's used:**

1. Fitbit Web API (https://dev.fitbit.com/build/reference/web-api/)
    - Used to access user data from Fitbit hardware.
2. <Food and nutrition API to recommend meals>
3. <possibly zomato to show restaurants with those foods>

4. World health data (given user age, height, weight, and/or sex show what national average is, something of that nature>

**Timeline:**

- Create flask starter kit - 5/12
- Getting fitbit - 5/13
- Create basic databases for user information - 5/14
- Create login and outline for pages - 5/16
- Export data needed from all apis - 5/18
- Create all databases - 5/20 b
- Compare me graphs - 5/22
- Finish layout for pages - 5/24